

I. PURPOSE AND NEED FOR THE PROPOSED ACTION

A. STUDY HISTORY

The Federal Highways Administration (FHWA), in cooperation with the U.S. General Services Administration (GSA), and the Maine Department of Transportation (MDOT), and in coordination with the New Brunswick Department of Transportation (NBDOT), propose to improve the flow of traffic at the Ferry Point international border crossing between Calais, Maine, and St. Stephen, New Brunswick, Canada (Figure I-1). Calais is adjacent to the St. Croix River and is approximately 161 km (100 mi.) northeast of Bangor and 32.2 km (20 mi.) northwest of the Atlantic Ocean. The international border crossing between Calais and St. Stephen is the eighth busiest commercial vehicle border crossing along the U.S./Canadian border.

The subject of a new border crossing in the Calais/St. Stephen area has been discussed for at least the past 24 years:

- August 1977—The city of Calais requested that the MDOT investigate the feasibility of constructing an additional border crossing.
- September/October 1977—MDOT met with the Calais City Council, St. Stephen City Council, and other provincial and regional officials to discuss the issue of a new border crossing. One result of this meeting was that MDOT and NBDOT agreed to perform studies to investigate short-term traffic operational improvements at the border.
- November 1989—Joint St. Stephen/Calais meeting about a new border crossing bridge was held in St. Stephen.
- December 1989—The city of Calais passed a resolution supporting the construction of a new border crossing.
- July 1990—MDOT and NBDOT began a study to evaluate the need and feasibility of a new border crossing.

Figure I-1, Location Map



Source: Magellan Geographix, 1994

- Summer 1991—MDOT and NBDOT conduct an origin and destination survey of motorists using the Ferry Point and Milltown border crossings. From the origin-destination survey, it was found that:
 - ❑ 70 percent of the border crossings occur at the Ferry point crossing.
 - ❑ 3.5 percent of the vehicles crossing at Ferry Point are heavy trucks.
 - ❑ Border crossing volumes are greatest in July and August.
 - ❑ Truck travel across the border does not vary significantly by time of year or day of week.
 - ❑ Approximately 32 percent of the border crossing trips are long distance “through” trips.
 - ❑ Of the “through” trips, approximately 74% make an intermediate stop in either Calais or St. Stephen.
 - ❑ Of those motorists making an intermediate stop in the area, 88 percent do so to shop, eat, or purchase fuel.
- October 1991—A special Calais council meeting was held to obtain comments from the citizens on the issue of a new border crossing.
- September 1992—A special council meeting was held in Calais to hear the results of the MDOT/NBDOT border crossing study. There was a positive response to the study results.
- March 1995—Calais hosted a joint meeting of the Calais and St. Stephen councils to discuss issues surrounding a new border crossing.
- June 1997— St. Stephen hosted a joint meeting of the Calais and St. Stephen councils to discuss issues surrounding a new border crossing.
- February 1998—The Calais City Council passed a resolution stating that they want a new border crossing to be located in Calais.
- April 1998—MDOT committed to working with NBDOT on the planning and environmental approval processes for a new border crossing in the Calais/St. Stephen area.
- January 1999—An application was filed with FHWA for funding the highway and bridge infrastructure associated with a new border crossing under the new National Corridor Planning and Development Program and the Coordinated Border Infrastructure Program.
- May 1999—MDOT received a \$1 million grant for preliminary engineering and environmental study of a new border crossing.
- August 1999—MDOT conducted a second origin and destination survey of motorists using the border crossings. From the origin-destination survey, it was found that:

- ❑ 48 percent of the border crossings trips were local trips (local trips defined as a trip to/from Calais, Baileyville, Woodland, Baring, Milltown, Robinston, Meddybemps, Princeton (all in Maine), St. Stephen, Oak Bay, Bartlett, Waweig, Union Mills, Milltown, St. Andrews (all in New Brunswick)).
- ❑ 20 percent of the border crossing trips were long distance trips to/from the local area.
- ❑ 32 percent of the border crossing trips were long distance “through” trips. Of the long distance through trips:
 - 28 percent stopped in Calais, ME.
 - 16.5 percent stopped in St. Stephen, NB.
 - 26.5 percent stopped in both cities.
 - 29 percent did not stop in either city.
- ❑ 15 percent of the through trips were heavy trucks.
- September 1999 — MDOT released its report prepared in response to a law enacted by the 118th Maine legislative requiring MDOT to conduct a study of costs, benefits, and social and environmental impacts relative to the development of an East-West highway in Maine, linking to the east the Canadian Atlantic Provinces and to the west, with the larger markets of Quebec, Ontario, and the Midwestern United States. Corridor ‘B’, the East-West Highway, is identified as the preferred corridor. Corridor ‘B’ begins at the Maine/New Brunswick border at Calais and proceeds westward on Route 9.

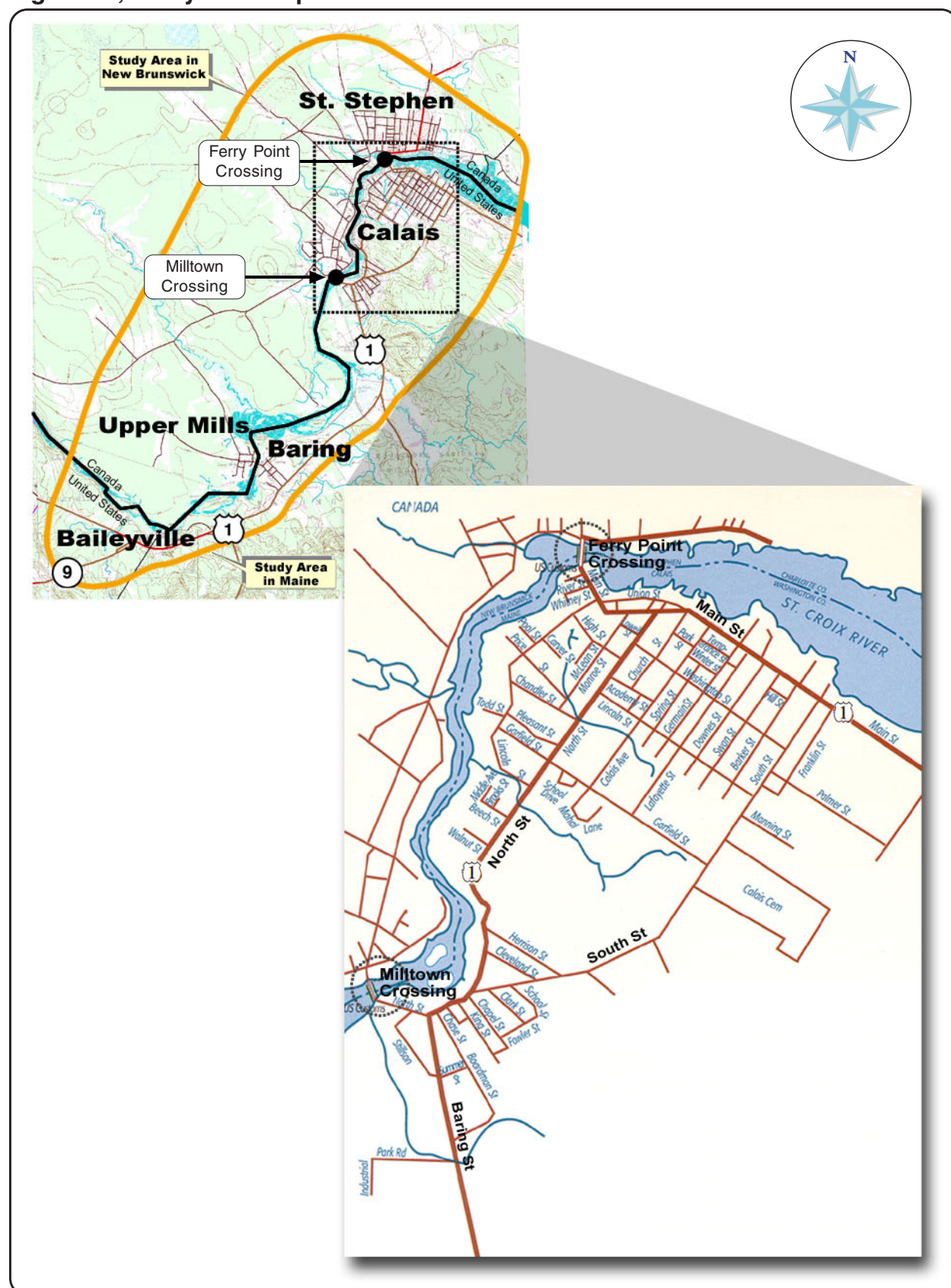
In the U.S., a study area encompassed a range of alternatives that included the city of Calais and portions of the towns of Baring and Baileyville (Figure I-2, next page). NBDOT also defined a study area encompassing a range of potential alternatives they were considering in New Brunswick.

The primary roads in Maine providing access to Calais are U.S. Route 1 and Route 9. Two border crossings exist in Calais: the Ferry Point Crossing and the Milltown Crossing. The Ferry Point Crossing is the primary crossing between the two countries and is used by the majority of travelers. The Milltown crossing is located in the Milltown section of Calais, a predominately residential area. The Milltown Crossing is used by local residents and trucks carrying bulk commodities.

The town of Baring is south and west of Calais along the St. Croix River and Route 1. From Route 1 in Baring, Route 191 provides a connection to the Machias area.

The town of Baileyville (also known as Woodland), also located along the St. Croix River, is west and south of Baring. Route 1 and Route 9 provide access to

Figure I-2, Study Area Map



Not To Scale

Baileyville. The Domtar pulp and paper mill, which employs a large number of people from the surrounding area, uses the Ferry Point and Milltown crossings to distribute its goods to Canadian customers.

In the last 10 years, MDOT has expended more than 70 million dollars to improve Route 9 between the Study Area and the Bangor Area. The majority of Route 9 was improved; the remaining projects will be completed within the next few years.

This study was performed and this Environmental Assessment (EA) was prepared by the FHWA, the MDOT, and the GSA, a cooperating agency. The study was performed in consultation with the NBDOT and the Canadian Customs and Revenue Agency (CCRA).

In support of this study, a Public Advisory Committee (PAC) was assembled at the beginning of the study (Section V-B-1 — Public Advisory Committee and Appendix A). The PAC was comprised of volunteers representing various local and regional government agencies and interest groups, and local citizens. The role of the PAC was to meet periodically throughout the study to review and comment on the study as it progressed and to provide insight to the study proponents on local issues and concerns. The PAC met nine times prior to the circulation of this draft EA.

B. STUDY PURPOSE AND NEEDS

1. Purpose

The study purpose is to identify a Preferred Alternative that would: 1) relieve traffic congestion at the Ferry Point Crossing while providing for the safe and efficient movement of current and future traffic, goods, and services, 2) provide a GSA-owned inspection facility that would facilitate the efficient inspection and processing of vehicles and people at the border crossing, and 3) create a U.S. gateway between Maine and the Canadian Atlantic Provinces as part of an overall east-west transportation corridor.

The PAC supports this purpose statement. In recognition and acknowledgment of this overall purpose statement, the prioritized goals and objectives of the PAC are:

- Maintain and enhance economic progress in the region
- Complete system linkage
- Provide the U.S. Customs Service with an efficient facility to perform its mission
- Facilitate future investment in the area
- Eliminate commercial traffic from the waterfront area
- Improve safety related to the transportation of hazardous materials, traffic accidents, and emergency response vehicles
- Protect the environment

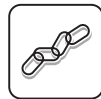
- Provide for the separation of truck and passenger vehicles in the central business district of Calais
- Protect the downtown area from increased traffic
- Preserve the existing infrastructure
- Provide for the protection of the waterfront area
- Improve opportunities for parking in downtown Calais

2. Study Needs

The needs considered in this study are based upon the highway and inspection facility configuration at the Ferry Point Crossing, coupled with an increase in commercial, local, and regional traffic, which has resulted in:

- Poor highway system linkage
- Inefficient GSA-owned inspection facility at Ferry Point Crossing
- Traffic congestion
- Safety hazards
- Freight delay

a. Poor Highway System Linkage



The state of Maine is committed to developing an East-West Highway system. In a speech on October 6, 1999, Governor Angus King stated "...it is clear from the studies [A Technical Report on An East-West Highway in Maine. MDOT. Sept 1999] that considerable economic benefits would accrue to the state by improving our links to Canada and in particular the growing markets of Montreal and Toronto." Governor King stated "...the highway component would emphasize the corridor running from the Maine/New Brunswick border at Calais northwesterly to the Maine/Quebec border at Coburn Gore." The Governor's strategy for this section of Maine's east-west link has four parts. The first part includes the construction of a new international border crossing in the Calais-St. Stephen area within the next five years to improve the flow of cross-border traffic.

Maine's Route 9 and New Brunswick's Arterial Highway 1 meet at the Ferry Point Bridge. These two highways bisect the main commercial districts in both Calais and St. Stephen. The bridge over the St. Croix River is a two-lane

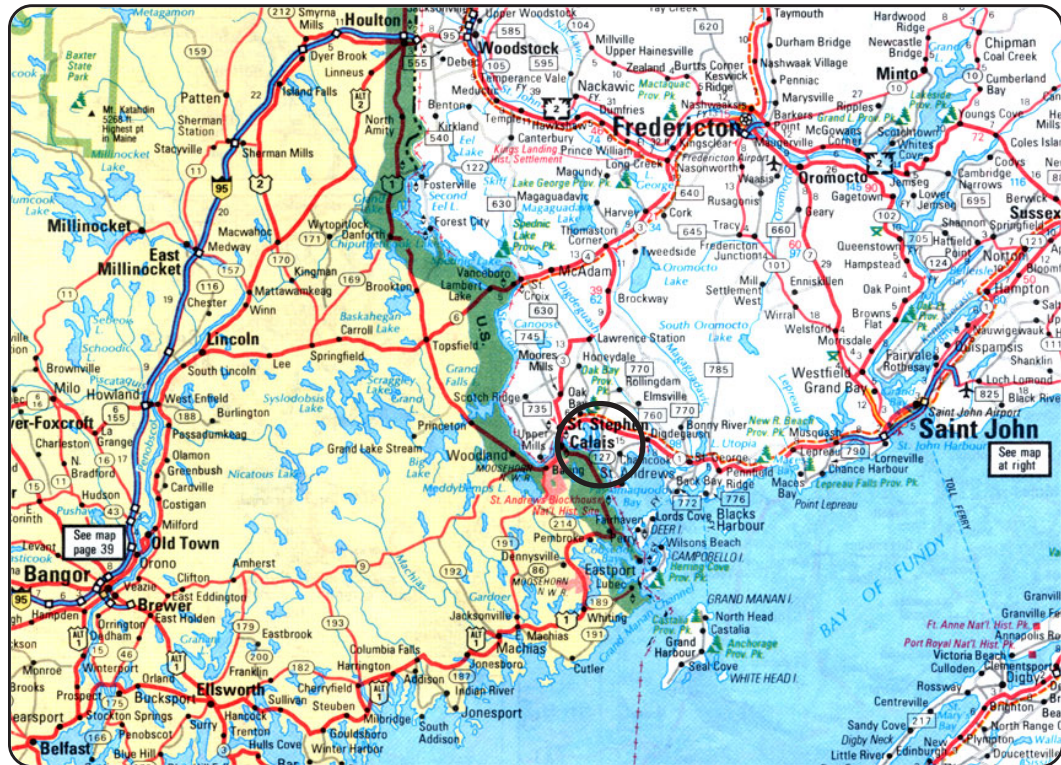


Photo I-1, Traffic backed-up on the Ferry Point Bridge, waiting to enter the United States.

structure with customs facilities at each end. The bridge and custom facilities are not capable of handling the existing and future traffic demand without causing delays in both directions.

Route 9 is the primary east-west highway through ‘downeast’ Maine, and is part of the National Highway System connecting the region with Interstate 95 at Bangor. “The purpose of the National Highway System is to provide an interconnected system, of principal arterial routes which would serve major population centers, international border crossings, ports, airports, public transportation facilities, and

Figure I-3, Regional Highway Map



other intermodal transportation facilities and other major destinations; meet national defense requirements; and serve interstate and interregional travel” (Title 23, United States Code, Section 103) (Figure I-3).

Route 9 has been designated as part of the East-West Highway in Maine. The purpose of the East-West Highway is to designate a primary link between the Canadian Atlantic Provinces and the provinces of Quebec and Ontario, and the Mid-western United States.

Route 1 intersects Route 9 in downtown Calais. Route 1 connects Calais with other parts of downeast Maine to the south and Aroostook County in the north. Route 1 and Route 9 share the same road from downtown Calais to Baileyville.

New Brunswick Highway 1 is the primary highway through southern New Brunswick and connects St. Stephen with St. John and the provinces of Nova Scotia,

Prince Edward Island, and Newfoundland. Immediately to the north of St. Stephen, New Brunswick Highway 3 intersects with Highway 1. Highway 3 connects St. Stephen with Fredericton.

New Brunswick Highway 1 is being upgraded to a limited access highway in the vicinity of St. Stephen. Additionally, a bypass to the north and west of St. Stephen has been constructed to remove trucks from the downtown area. Trucks (other than those carrying bulk commodities) must use the Ferry Point Crossing to enter the United States.

To cross the international border, motorists traveling east on Route 9 must use Route 1, Route 1 on local roads in Calais, New Brunswick Highway 1 on local roads in St. Stephen, and re-enter the highway system in New Brunswick north of St. Stephen. The existing bridge and adjacent inspection stations do not provide a level of mobility consistent with the National Highway System or East-West Highway system. Although a level of delay is expected at an international border crossing, the Ferry Point crossing acts as an impediment in developing the East-West Highway system by requiring motorists to travel local roads to cross the border.

b. Inefficient GSA-owned Inspection Facility at Ferry Point Crossing



The existing GSA-owned facility at Ferry Point is situated on 0.3 hectare (ha) (0.83 ac.) and has numerous problems and deficiencies. The federal agencies assigned to the Calais area cannot fulfill their missions due to substandard facilities. Typically, border crossing inspection facilities are situated on a minimum of 8.1 ha (20 ac.).

(1) Office Building

The office building is a two story brick building constructed in the 1930s. The building is listed on the National Register of Historic Places (NRHP).

The agencies within this building lack adequate office space and have no space for expansion. The U.S. Customs Service is the most constrained, with substandard conditions which consist of a lack of: offices for supervisors, search and inspection rooms, and lock-up facilities. Lack of privacy is a major problem; secondary searches of persons, clothing, and packages are performed in the lobby after other people are removed and the doors closed temporarily to other business. Body searches must be conducted in the public restroom. The lock-up facility consists of one chair with handcuff rails in the lobby, within full view of the public both inside and outside of the building.



Photo I-2, View of the GSA-owned facility (facing northwest). It consists of an office building, two car inspection lanes, and a small commercial inspection area.

(2) Traffic Circulation for Commercial Vehicles

The lack of space and the configuration of the on-site highways, combined with the immediately adjacent Ferry Point Bridge, create a substantial bottleneck for the flow and inspection of traffic. Traffic approaches the inspection facility in a single lane on the Ferry Point Bridge. At the southern end of the bridge, commercial vehicles, including all tractor-trailer trucks, must make a sharp right turn to the west, within a few feet of the office building, before proceeding up an incline to the single truck inspection booth. On some occasions when the incline is icy, trucks must back up to move forward after stopping.

At the inspection booth, about 50 percent of the trucks are processed within 2 to 3 minutes, and are directed to pass through the commercial vehicle area. The remaining truck traffic must park to visit brokers that are located either on-site or in town, and/or undergo a more detailed secondary inspection.

A number of problems exist in this very small and severely congested area used for secondary inspection. U.S. Custom's personnel find it difficult to control truck movements within this area. Approximately 10 to 12 trucks can occupy the commercial vehicle area if parked correctly. Trucks must make a sharp left turn to the south to pass beyond the inspection booth, and have on a number of occasions damaged the northern side of the building.



Photo I-3, View of the GSA-owned facility (facing south). A truck making a sharp right turn into the commercial inspection area is causing traffic to back up across the bridge.



Photo I-4, View of a truck entering the commercial inspection area (facing west).



Photo I-5, View of a truck leaving the commercial inspection area (facing west).

Vehicle collisions and damage to rims and tires commonly occur in this area for secondary inspection, as trucks maneuver for position to park, move to the secondary inspection dock on the southern side of the inspection booth, or simply attempt to exit the facility. The slope of the area creates additional problems, particularly for heavily loaded older vehicles, which have occasionally broken axles while attempting to turn in this area.

Secondary inspections, which consist of commercial vehicles being unloaded at the loading docks on the southern side of the inspection facility, can be exceedingly difficult when the area is full of commercial vehicles. There is no space for expansion of the secondary inspection facility at the Ferry Point Crossing. The secondary inspection facility lacks a refrigeration room for the storage of perishable commodities, such as fresh or frozen foods. The facility lacks x-ray equipment to facilitate inspections, particularly of bulk materials, such as wood chips.

Lack of space in the commercial vehicle area forces vehicles onto the neighboring properties, including property owned by the Eastern Maine Electric Cooperative and a public street. Several years ago the fence that separated the commercial vehicle area from the street was removed to provide more parking space and to give large trucks more maneuvering room. Use of this space by truck traffic is a daily event and blocks public access, including emergency and non-emergency vehicle access, to the Eastern Maine Electric Cooperative property.



Photo I-6, Trucks waiting to be inspected are parked on property owned by the Eastern Maine Electric Cooperative storage area and a public street.

Processing oversized loads is very difficult. Oversized trucks are too big to travel through the commercial vehicle area and must be routed around the canopied booths into the oncoming travel lane, with inspections done within the travel lane of Main Street. There is no parking for these vehicles and secondary inspections are done in the public street. Double trailers are not permitted to pass through this inspection facility.

The inadequate space for traffic circulation and parking compromises the ability of the U.S. Border Patrol to fulfill part of their mission. The U.S. Border Patrol needs to respond to requests from the U.S. Department of Immigration for off-site assistance for incidents along the border. The U.S. Border Patrol also provides backup assistance to local police. The U.S. Border Patrol frequently has difficulty responding to requests for assistance as a result of the inability to exit the facility quickly because of congestion.

(3) Parking Constraints

There is no public or visitor parking at the Ferry Point facility. Employee and agency vehicle parking is inadequate and limited to an area adjacent to the commercial vehicle area. Truck and vehicle inspections often block access to these parking spaces, forcing employees to wait to park and/or to exit the facility.

Limited employee parking is available along the sides and in the rear of the office building, adjacent to the commercial vehicle area, and along the southern side of the exit lane of the commercial vehicle area. Parking is available along a stone wall adjacent to the entrance to the commercial vehicle area on the incline leading to the truck inspection booth. This area is inaccessible when commercial vehicles are waiting for inspection and trucks have struck employee vehicles parked in this location. Occasionally, employees of the facility are forced to park on property owned by the Eastern Maine Electric Cooperative or other off-site locations.

Three parking spaces are adjacent to the rear of the office building in front of a garage used for the secondary inspection of passenger cars. Parking employee or other vehicles in front of the garage used for the inspection of passenger vehicles makes it difficult to access the garage and can conflict with the secondary inspection of trucks. The garage is too small to do inspections properly, which usually involve several inspectors. This garage lacks a vehicle lift to view the underside of vehicles and an area to remove and secure or restrain vehicle occupants. More than one interior, secondary vehicle inspection bay is needed.

One parking space for the secondary inspection of passenger vehicles is located on the south side of the office building. This uncovered space is small and not adequate to secure vehicles; people have been known to leave before inspection when Customs officials have been particularly busy.

The area available to store government vehicles is limited to approximately three spaces and is used for storing a vehicle used for towing and a boat used by the Border Patrol. These vehicles are stored outside. The space used to store impounded vehicles is on property owned by the Eastern Maine Electric Cooperative and is limited to about three spaces.

(4) Non-commercial Vehicle Processing

Non-commercial vehicles entering Maine are routed to either of two canopied inspection booths. During summer months, these two lanes and inspection booths are often inadequate to process vehicles quickly. This contributes to traffic delay. This canopied area is not equipped with a ventilation system, which causes a build-up of exhaust fumes.

Vehicles are stopped and passengers are questioned at the inspection booths. A small percentage of passenger vehicles are detained for secondary inspection. Secondary inspections are done in either of two locations — the garage for the secondary inspection of passenger vehicles or the single parking space to the immediate south of the office building.

(5) Pedestrian Traffic

As part of their mission, the U.S. Customs Service performs inspections of pedestrians. Pedestrians entering Maine must cross two lanes of traffic twice to get to the booths for inspection. After passing through Customs, pedestrians must cross the exit for commercial vehicles; there are no sidewalks for pedestrians.

Sometimes, pedestrians take advantage of the situation, and avoid the inspection booths and process by remaining on the eastern side of the bridge, where the Customs official's view may be blocked by inbound or outbound traffic.

Outbound pedestrians, who also must cross traffic using the same travel pattern, are even more difficult for the U.S. Customs Service officials to speak to because they travel on the eastern (opposite) side of the street from the Customs facility. Inbound and outbound vehicles often block the view of U.S. Customs officials of outbound pedestrians.

(6) Outbound Vehicle Processing

As part of their mission, U.S. Customs performs inspections of outbound vehicles leaving Maine. There are no areas or facilities available for the processing of outbound traffic. Outbound inspections are done within the travel lane of Main Street because there is no area to pull vehicles out of traffic. The lack of outbound inspection facilities reduces the number of outbound inspections that can be performed and contributes to the delay of traffic. When formal outbound inspections are not being conducted, U.S. Customs officials' view of the outbound lane of traffic is often blocked by inbound traffic, making it difficult for U.S. Customs officials to identify suspicious vehicles.

Similarly, it is difficult to perform the outbound inspection of pedestrians. When leaving Maine, pedestrians must reach a certain point to "commit" to leaving the state. The view of this physical point is often blocked by inbound traffic.

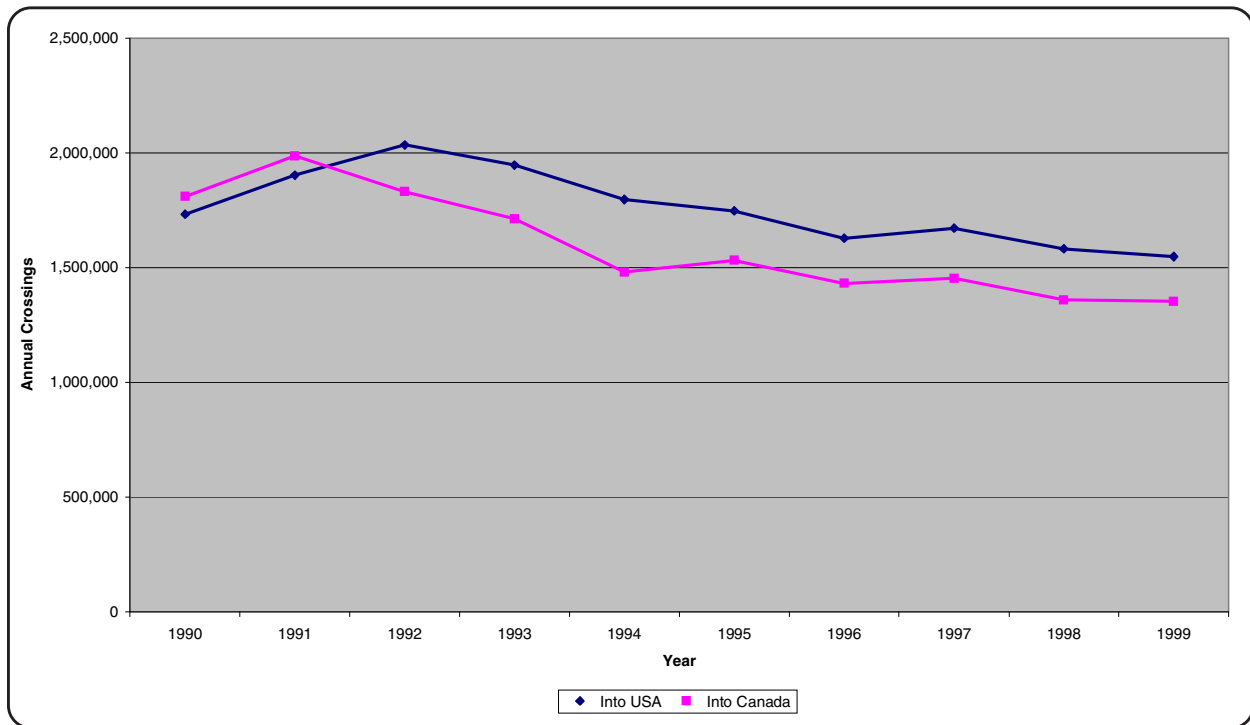
c. Traffic Congestion



The Ferry Point Crossing is a major route for U.S. tourists driving east into Canada (and vice versa), and serves local and regional business, industry, and commuter traffic.

The U.S. Customs Service and the CCRA record cross-border activity. These data indicate that total traffic volumes crossing the border at Calais/St. Stephen have declined over the past ten years. Between 1990 and 1999, annual two-way crossings at the Calais/St. Stephen crossing declined by 18 percent, an un compounded annual decline of 1.8 percent (Figure I-4, next page). While total traffic has declined over this period, crossings by commercial vehicles have grown by 14 percent, an un compounded annual growth of 1.4 percent.

Traffic entering Canada from Calais (using both crossings) reached a peak in 1991. Since this peak, total traffic entering Canada has declined by 31 percent. Traffic entering the U.S. reached a peak in 1992. Since this peak, total traffic has de-

Figure I-4, Total Crossings by Direction

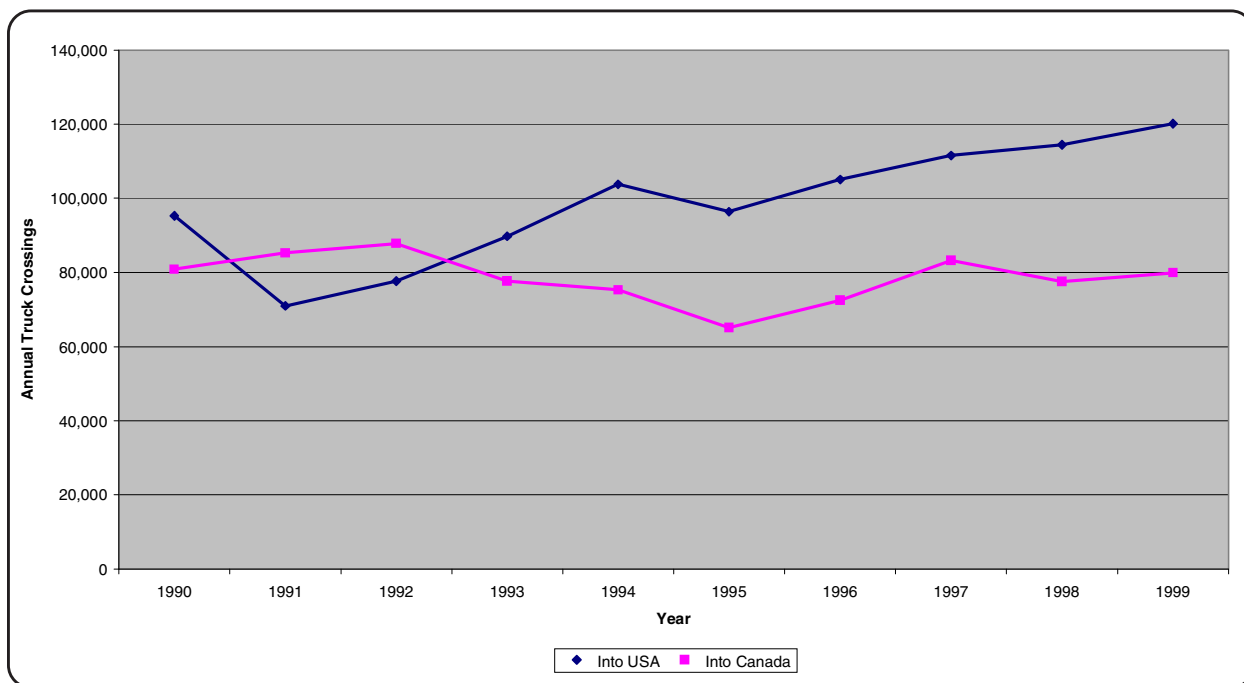
clined by 24 percent. The decline in traffic crossing the border at Calais/St. Stephen has slowed in recent years, with total traffic decline of approximately five percent in both directions since 1996.

However, the trends in truck traffic have been opposite those in total traffic (Figure I-5, next page). Truck traffic entering Canada reached a peak in 1992. Three years of declining truck traffic resulted in the lowest number of truck crossings into Canada over the decade occurring in 1995. In 1999, truck crossings into Canada were only slightly lower than in 1990. Trucks entering the U.S. at Calais/St. Stephen reached a low point in 1991. Since 1991, truck traffic has increased every year with the exception of 1994 to 1995. Total truck traffic growth entering the U.S. at Calais between 1991 and 1999 was 42 percent. Since 1995, truck crossings at Calais into Canada have increased by 23 percent, an annual growth rate of 4.6 percent, and truck crossings into the U.S. have increased by 25 percent, an annual growth rate of five percent. Since 1995, two-way truck crossings have increased by 4.8 percent per year, un compounded.

Traffic volume data was collected within the Study Area during August 1999. Both 24-hour volumes at locations throughout the Study Area and turning movement volumes at important intersections were collected.

To determine existing cross-border travel served by the Calais/St. Stephen border crossings, an origin-destination postcard survey was distributed on August 24th and 25th, 1999. 7,442 surveys were distributed over the 24-hour period. Of these, 1,288 surveys were returned (a response rate of 17.3 percent). The survey responses

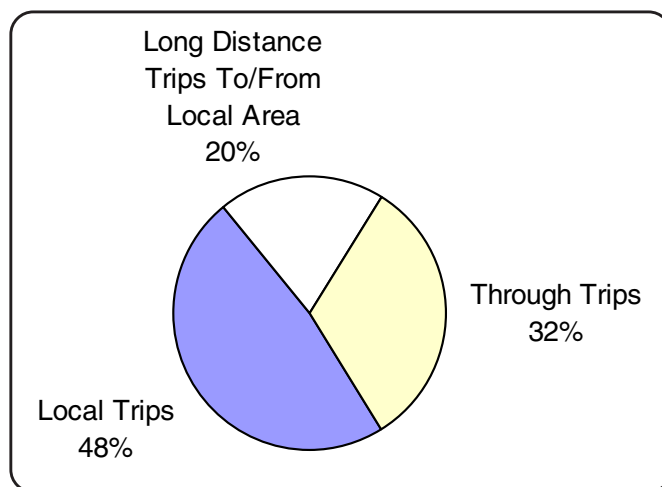
Figure I-5, Total Truck Crossings



indicated that 48 percent of the trips were local¹, with the trips beginning and ending in the Calais/St. Stephen region and 20 percent of the trips had either an origin or a destination in the Calais/St. Stephen region (Figure I-6). The remainder of these trips, 32 percent, had neither an origin nor a destination in the Calais/St. Stephen region. Of these through trips, 15 percent were commercial vehicle trips.

Using the data collected in 1999, data collected from the origin-destination survey in 1991, and local, statewide, and historical bor-

Figure I-6, Origin-Destination Survey Results



¹ Local area defined as trips to or from Calais, Baileyville, Woodland, Baring, Milltown, Robbinston, Meddybemps, and Princeton (in Maine) and St. Stephen, Oak Bay, Bartlett, Waweig, Union Mills, Milltown, and St. Andrew (in New Brunswick).

der crossing traffic data, MDOT developed future year traffic volumes within the Study Area (Table I-1). The forecasted traffic volumes were determined using a travel demand model developed specifically to analyze trans-border traffic flows within the Calais/St. Stephen region.

It is anticipated that truck growth would continue at a slightly slower rate than the 4.8 percent annual growth recorded in the past five years. The forecast traffic growth for trucks is 3.9 percent, uncompounded, through the year 2030. It is anticipated that the decline in non-commercial border crossing traffic recorded in recent

Table I-1, Existing and Future Daily Peak Season Traffic Volumes

Location	1999 No-build Volumes ¹			2030 No-Build Volumes ¹		
	All Vehicles	Trucks	Cars	All Vehicles	Trucks	Cars
Ferry Point Bridge	6,698	653	6,045	10,391	1,450	8,941
Milltown Bridge	2,573	330	2,243	3,795	759	3,036
Main St. east of Monroe St.	12,224	573	5,395	14,290	1,343	8,002
Main St. east of Church St.	9,198	106	1,029	10,750	147	1,479
Main St. east of South St.	7,150	72	781	8,360	86	1,144
North St. south of Main St.	14,226	536	4,668	16,620	1,285	6,964
North St. north of South St.	11,054	529	3,493	12,900	1,274	5,279
North St. east of Baring St.	15,446	563	4,010	18,050	1,320	6,019
South St. south of Garfield St.	5,064	34	320	5,920	46	461
Baring St. south of North St.	13,616	817	2,721	16,200	1,975	4,025
Rt. 1 at Calais/Baring t/l	11,250	817	2,692	16,101	1,975	3,985
Rt. 1 at Baring/Baileyville t/l	9,406	802	2,556	12,180	1,943	3,790
Rt. 1 North (external station)	6,136	198	364	7,500	478	377
Rt. 9 West (external station)	4,112	604	2,192	5,770	1,465	3,413
Rt. 1 South (external station)	4,392	69	524	5,140	81	779
Total Crossings	9,271	983	8,288	14,186	2,209	11,977
VMT ²	290,727	24,845	107,954	367,782	57,898	159,275
VHT ³	7,205	525	2,446	9,344	1,231	3,669

Notes:

¹ Volumes represent a typical summer day

² Vehicle Miles of Travel

³ Vehicle Hours of Travel

t/l – Town Line







external station – outside Study Area

years would not continue. Non-commercial, trans-border traffic is forecast to grow at an uncompounded annual rate of 1.5 percent through the year 2030. Traffic that does not cross the border is anticipated to grow at an uncompounded annual growth rate of one percent.

The border crossing at Ferry Point is the only area of congestion within the Study Area. The capacity of the existing inspection stations is insufficient to handle the travel demand across the border (see Section B-2-b — Inefficient GSA-Owned Inspection Facility at Ferry Point Crossing). Traffic backs up to form a standing queue approaching both border crossings during most daylight hours. The traffic queue from the Canadian inspection station frequently reaches to the intersection of Main Street and Union Street. Traffic typically backs up from the U.S. inspection station through downtown St. Stephen. Backups as far as the intersection of New Brunswick Highways 1 and 3 are common.

The levels of service (LOS) provided by the region's highway system was estimated to determine the relative traffic performance of these highways for existing and future year forecast traffic volumes (Figure I-7). LOS is a qualitative measure of traffic flow. LOS consists of six grades, A through F, with A denoting free traffic flow while F represents severe traffic congestion and delay.

Figure I-7, LOS for Highways

Level of Service	Traffic Flow Condition
A 	Free Flow Operations Affords the motorist a high level of physical and psychological comfort.
B 	Reasonably Free Flow Operations Ability to maneuver within traffic stream is only slightly restricted.
C 	Stable Operations Small increases in flow will cause substantial deterioration in service.
D 	Bordering on Unstable Flow Freedom to maneuver within traffic stream is severely limited.
E 	Extremely Unstable Operations Maneuverability is extremely limited and the level of physical and psychological comfort afforded the motorist is extremely poor.
F 	Forced or Breakdown Flow Traffic jammed.

The section of Route 1 between the Calais Industrial Park and Route 9 in Baileyville is a rural two-lane highway. The ideal experience on a two-lane highway has the motorist driving at their desired travel speed at all times. Under these ideal conditions, motorists encountering slower moving vehicles may readily and safely pass by using the opposing travel lane. Ideal conditions represent a minimum of time delayed by other motorists without the opportunity to pass. Accounting for this mo-

torist expectation, LOS can be equated to the percent of time delayed. The volume to capacity ratio (v/c) is the two-way volume divided by the maximum number of vehicles that could be carried by the highway (Table I-2).

Table I-2, LOS for the 2-lane Segment of Route 1 at the Calais/Baring Town Line

Two-Lane Analysis	LOS	v/c Ratio
1999 Existing Conditions	D	0.47
2030 Forecast Conditions	E	0.67

d. Safety Hazards



A substantial number of commercial trucks transport potentially hazardous materials across the Ferry Point Bridge each year. In 1999, approximately 6,211 trucks carrying hazardous materials entered Maine at the Ferry Point Crossing (U.S. Customs Service 2000). While the number of trucks carrying potentially hazardous materials from Maine into New Brunswick at the Ferry Point Crossing is unknown, the CCRA conservatively estimates that there are an average of ten to twelve trucks per day carrying hazardous materials through their facility (CCRA 2000).

A catastrophic hazardous materials incident has not occurred in the Study Area. The possibility exists that such an event could occur in St. Stephen or Calais given the number of trucks carrying potentially hazardous materials through these two areas using roads requiring several turns.

Commercial vehicles carrying hazardous materials are not processed through the Milltown Crossing.



Photo I-7, Trucks transport hazardous materials through the Ferry Point crossing.

e. Freight Delay



In 2000, approximately 138,500 trucks entered Maine from New Brunswick by the Ferry Point and Milltown Crossings; the vast majority of these trucks used the Ferry Point Crossing (U.S. Customs Service 2000). Freight trucked through the Ferry Point Crossing is the primary cause of the overall traffic congestion problem at the border.

Freight delay data was collected at five locations at the Ferry Point Crossing between July 16-18, 2000 and September 17-19, 2000. Data collected included the time trucks entered the traffic queue until they were received for inspection. Data did not include normal unimpeded travel time or the time of the actual inspection.

Analysis of this freight delay data showed that freight delay was a problem for trucks using the Ferry Point Crossing. Maximum delays of more than one hour and thirty minutes were documented during both the peak and non-peak travel seasons (Maine Department of Transportation 2000).

The freight delay was heaviest on Sunday afternoons when trucks and automobiles formed queues from the Ferry Point Bridge onto Milltown Boulevard, through downtown St. Stephen, and onto King Street. The traffic queues, for both inbound and outbound traffic, have been known to extend for several miles during the summer tourist season.



Photo I-8, Trucks waiting in line to enter the U. S. inspection station at Ferry Point.

C. OTHER EISs OR EAs THAT INFLUENCE THE SCOPE OF THIS EA

No other individual federal or state actions influence the scope of this EA.

Regardless of the alternative identified as the Preferred Alternative for satisfying the Purpose and Needs of this study, the outcome of this study would play an integral role in helping MDOT's efforts to improve east-west travel across the state. An improved border crossing would play an important part, along with other transportation improvements identified in the State of Maine's East-West Highway Study, in maintaining and improving the long-term competitive position of the region.

D. THE DECISION THAT MUST BE MADE

MDOT and FHWA, in cooperation with the GSA, must decide which alternative best satisfies the Purpose and Needs of the study, with the least adverse impact, and at an affordable cost. Additionally, if a new border crossing is to be built, the State of Maine and Province of New Brunswick must reach agreement on the same location for proposed facilities in both countries to meet at the border, while at the same time obeying their own laws and requirements.

The purpose of this study is to provide the FHWA, MDOT, and the GSA with a full accounting of the effects of the alternatives developed for meeting the study Purpose and Needs. It is the result of a process established to comply with the intent of the National Environmental Policy Act (NEPA). The NEPA process is intended to help public officials make decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 CFR 1500.1).

An EA must briefly discuss the Purpose and Need for the proposed action, the range of alternatives considered, the resultant environmental impacts from the proposed action, and the agencies and persons consulted during the planning of the proposed action (40 CFR 1508.9b). The EA must provide sufficient information for the sponsor, the FHWA, to determine whether or not the results of the project, as proposed, would result in a significant impact to the environment. If the project would result in a significant impact to the environment, an environmental impact

statement (EIS) would be prepared. If no significant impact to the environment is anticipated, a Finding Of No Significant Impact (FONSI) is prepared. A FONSI is a public document that briefly describes why an action would not require the preparation of an EIS. The selection of a Preferred Alternative and the FONSI are based upon the contents of the EA.

E. SCOPE OF THIS ENVIRONMENTAL ANALYSIS

This analysis entailed detailed study of the alternatives and their impacts to the social, economic, natural, and atmospheric environment in the Study Area and surrounding region. The environmental consequences associated with the construction and operation of the no build and build alternatives were examined.

F. APPLICABLE REGULATIONS AND REQUIRED COORDINATION

This study was performed and this EA was prepared using a process that integrated the Maine Sensible Transportation Policy Act (STPA) and NEPA. Under this broad umbrella of an integrated STPA/NEPA process, compliance with many other federal and state statutes, orders, and policies is required.

The STPA applies to significant capital improvements in Maine that increase capacity by constructing one or more through travel lanes, a highway on new location, or a bridge on new location. It recognizes that there are benefits and costs (financial, energy, and environmental) to transportation, and it provides policies and management strategies for the analysis of these issues. This rule requires MDOT to consider available and future modes of transportation and to minimize the effects of transportation on public health, air quality, water quality, land use, and other natural resources.

NEPA is the nation's broadest environmental law and basic environmental charter. NEPA applies to all federal agencies and most of the activities that they fund or manage that affect the environment. It requires federal agencies to consider the natural resource, social, and economic impacts of their actions and disclose them in a public decision-making document. NEPA requires the preparation of environmental documents to ensure that federal agencies follow the purpose and intent of the law.

The following statutes and orders apply to the proposed action and have been considered during the performance of this study and preparation of this EA:

- Civil Rights Act of 1964. Title VI. 42 USC 2000.
- Coastal Zone Management Act. Federal Register. 23 CFR 771.18.
- Endangered Species Act of 1973. Federal Register. 50 CFR 17.
- Environmental Impact and Related Procedures; Final Rule. Federal Register. 23 CFR Parts 635, 640, 650, 712, 771, and 790 & 40 CFR Part 622. August 28, 1987.
- Executive Order 11988. Floodplain Management. 40 CFR 6030. Signed May 24, 1977.

- Executive Order 11990. Protection of Wetlands. 42 FR 26961. Signed May 24, 1977.
- Executive Order 12898. Federal Actions to Address Environmental Justice in Minority.
- Land and Water Conservation Fund Act. Federal Register. 50 CFR 25-29.
- Maine Public Law. Natural Resource Protection Act. 38 MRS, Chapter 3 § 480.
- Maine Revised Statutes. Sensible Transportation Policy Act of 1991. 23 M.R.S. § 73.
- National Flood Insurance Act of 1968. Federal Register. 24 CFR 1910 and 23 CFR 650 Subpart A.
- National Historic Preservation Act. Federal Register. 23 CFR 771.20 and 36 CFR 800.
- Populations and Low-Income Populations. 59 FR 7629. Signed February 11, 1994.
- Preservation of Parkland. Federal Register. 23 CFR 771.19.
- Public Law 91-190. The National Environmental Policy Act of 1969. 42 USC § 4321 et seq. Signed January 1, 1970.
- Public Law 95-217. Clean Water Act of 1977. 33 U.S.C. § 1251.
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. Federal Register. 40 CFR Parts 1500-1508. November 29, 1978.
- Rivers and Harbor Act of 1899. 3 U.S.C. 401-413.
- Uniform Relocation Assistance and Real Property Acquisition Act of 1970. 42 USC 4601.
- Wild and Scenic Rivers Act. Federal Register. 43 CFT 6223 and 36 CFR 251.

Additionally, many other policy memorandums from the FHWA, MDOT, and GSA were consulted and followed during the performance of this study.